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| 09/961,147 | 09/24/2001 | Takushi Fujita | 1573.1007 | 5366 |

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DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on _19 August 2004_.

2a)☒ This action is **FINAL**.          2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) _1-26_ is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-26_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
   application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

## DETAILED ACTION

This communication is responsive to Amendment, filed 08/19/2004.

Claims 1-26 are pending in this application. In the Amendment, claim 26 was added, and

claims 1-25 were amended. This action is made Final.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice.

They appear to be a literal translation into English from a foreign document and are replete with

grammatical and idiomatic errors.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 6-8, 10-11, 13-18, 20-22 and 24-25 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Robertson et al. ("Robertson", US 6,486,895) and Weinberg et al.

("Weinberg", U.S. Pat. No. 6,549,944).

As per claim 1, Robertson teaches an information processing apparatus for displaying a

plurality of linked information objects in a virtual space according to visual field data, the

information objects representing respective content items of content type, said visual field data

defining a visual field in said virtual space, said apparatus comprising:

holding means for holding, in an executable manner, a plurality of different intermediate

data generating means specific to said respective content type of information object for

generating respective pieces of intermediate data for display (FIG.2, step 202, *generate page

objects for each web page*, col.5, lines 50-52), and for holding, in an executable manner a

plurality of different display image generating means specific to said respective content type of

the information objects for generating respective display images from said respective generated

pieces of intermediate data (FIG.2, step 204, r*ender and display*, col.5, lines 57-58);

first means for causing said plurality of different intermediate data generating means to

generate the respective pieces of intermediate data for displaying respective particular

information objects of the content type, when it is determined that said respective pieces of

intermediate data of said respective particular information objects to be generated (col.10, lines

61-64, *object generation circuitry*); and second means for causing said plurality of different

display image generating means to generate display images of said respective particular

information objects from said respective generated pieces of intermediate data, when it is

determined that  said respective particular information object to be displayed (col.11, lines 5-10,

*displaying page object*).

Robertson does not teach said apparatus comprising: holding means for holding, in an executable manner, a plurality of different intermediate data generating means and display image generating means specific to said respective different content types of information objects; and first and second means for causing said plurality of different intermediate data generating means to generate the respective pieces of intermediate data for displaying respective particular information objects of the content type, and to generate display images of said respective particular information objects from said respective generated pieces of intermediate data, according to geometric relation between visual field and the representative information object. However, Weinberg teaches said apparatus comprising: holding means for holding, in an executable manner, a plurality of different intermediate data generating means and display image generating means specific to said respective different content types of information objects (col. 8, lines 40-52; col. 9, lines 38-62); and first and second means for causing said plurality of different intermediate data generating means to generate the respective pieces of intermediate data for displaying respective particular information objects of the content type, and to generate display images of said respective particular information objects from said respective generated pieces of intermediate data, according to geometric relation between visual field and the representative information object (figs. 1-3; col. 9, lines 3-18; col. 11, lines 1-15 and lines 32-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the teaching of Weinberg in the invention of Robertson because it provides webmasters with analysis tools needed to evaluate the performance and effectiveness of Web sites.

As per claim 2, Robertson teaches the information processing apparatus according to claim 1 wherein each intermediate data generating means and each display image generating means operate asynchronously with each other for a respective content type of a particular information object (FIG.2, col.5, lines 38-65, *generating and displaying*).

As per claim 3, Robertson teaches the information processing apparatus according to claim 1 wherein each intermediate data generating means operates under control of said first means, to generate and renew pieces of intermediate data for displaying a particular information object, and each display image generating means operates simultaneously with each respective intermediate data generating means for the particular information object under control of said second means, to generate a display image of the particular information object from said generated and renewed intermediate pieces of intermediate data (FIG.9, col.8, lines 31-39 *graphical object control*) .

As per claim 4, Robertson teaches the information processing apparatus according to claim 1 wherein said holding means holds a plurality of information object content type specific data processing means, said at least one content type specific data processing means including at least intermediate data generating means for generating intermediate data of an information object of one content type and display image generating means for generating a display image of the information object of said one content type (FIG.9, *content part*, col.8, lines 40-48).

As per claim 6, Robertson teaches the information processing apparatus according to claim 1 wherein each intermediate data generating means is implemented as program codes, and each display image generating means is implemented as program codes; and said apparatus

further comprises data capturing means for capturing said intermediate data generating program

codes and said display image generating program codes into said holding means from an external

device or a communication line (col.13 line 10- col.14, line 7, *program code instructions*).

As per claim 7, Robertson teaches the information processing apparatus according to

claim 1 further comprising: visual field data managing means for smoothly changing said visual

field data according to an input command and display means for displaying the generated display

images of said respective particular information objects (Figs. 1 and 6; col.4, lines 50-52; col.7,

lines 41-46.

As per claim 8, Robertson teaches the information processing apparatus according to

claim 1 further comprising: means for assigning a display priority to each of plurality of

information objects (col.7, lines 37-60, *display priority indicated by page sequence*); said first

means comparing said display priority of a particular information object with a predetermined

threshold to thereby determine to generate a piece of the intermediate data of said particular

information object; said second means comparing said display priority of said particular

information object with a predetermined threshold to thereby determine whether to generate a

display image of said particular information object (col.5, lines 12-21, *predetermined context

dependent*).

As per claim 10, Weinberg teaches the information processing apparatus according to

claim 1 wherein each display image generating means determines a form in which a generated

display image is displayed, according to the geometric relation between said visual field and said

particular information object (figs. 1-3; col. 11, lines 1-15 and lines 33-45).

As per claim 11, Robertson teaches the information processing apparatus according to claim 1 wherein display priorities are assigned to respective ones of said plurality of information objects, and when a display image of a particular information object is to be displayed, corresponding one of display image generating means determines a form in which said display image of said particular information object is to be displayed, in accordance with the display priority of said particular information object (col.7, lines 37-60, *display priority indicated by page sequence*).

As per claim 13, Robertson teaches the information processing apparatus according to claim 1 further comprising: third means for selecting one of said plurality of information objects as a representative object and defining said visual field by defining a geometric relation of said representative object to said visual field, said third means altering said representative object, without changing the geometric relations of said plurality of information objects to said visual field, as said visual field shifts in said virtual space (col5, lines 50-65, *page object is representation*) ; said first means traversing linkages between said plurality of information objects, starting with said representative object, to thereby determine whether to generate a piece of intermediate data of a particular information object (col.5, line 66-col.6, line 8, *traverses page objects*).

As per claim 14, Robertson teaches the information processing apparatus according to claim 14 wherein display priorities are assigned to respective ones of said plurality of information objects, and said third means selects one of said plurality of information objects having a highest display priority as said representative object (col.7, lines 37-60, *display priority indicated by page sequence*).

Claims 15-18, 20-22 and 24 are similar in scope to claims 1-4, 8-9, 11 and 13

respectively, and therefore are rejected under similar rationale.

Claim 25 and 26 are rejected under the same rationale as claim 1.

Claim 5, 9, 12, 19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Robertson et al. ("Robertson", US 6,486,895), Weinberg et al. ("Weinberg", U.S. Pat. No.

6,549,944), and Gounares et al. ("Gounares", US 6,681,370).

As per claim 5, while Robertson and Weinberg teach the information processing

apparatus according to claim 1 wherein said holding means holds in an executable manner a

plurality of different data processing means specific to said different content types of the

information objects ("Weinberg", col. 9, lines 39-67), each data processing means including

corresponding one of said intermediate data generating means for generating a piece of

intermediate data for a content type of a particular information object, corresponding one of said

display image generating means, corresponding content data capturing means specific to said

content type for capturing content data of said particular information object ("Robertson", FIG.2,

step 202, *generate page objects for each web page*, col.5, lines 50-52). Robertson does not

specifically teach a data deleting means specific to content type for deleting generated data in a

data memory. Gounares teaches a method of information synchronization, wherein a data

deleting means specific to content type for deleting generated data in a data memory (col.15,

lines 35-41, *deleting data content*). It would have been obvious to an artisan at the time of the

invention to combine Gounares' teaching with the apparatus of Robertson and Weinberg because

it allows for flexibility by providing document change and update capabilities.

As per claim 9, Robertson and Weinberg teach the information processing apparatus according to claim 1, comprises a memory region for storing therein said intermediate data and managing data for said particular information objects (FIG.1, col.4, lines 50-52, *internal memory*), and means for assigning display priorities to respective ones of said plurality of information objects (col.7, lines 37-60, *display priority indicated by page sequence*); said first means comparing said display priority of a particular information object with a predetermined threshold to thereby determine whether to generate or renew pieces of intermediate data of said particular information object, said first means causing corresponding one of said intermediate data generating means to generate or renew said pieces of intermediate data of said particular information object when the display priority of said particular information object is higher than the predetermined threshold (col.5, lines 12-21, *predetermined context dependent*); Robertson and Weinberg does not specifically teach a data deleting means for deleting generated data in a data memory. Gounares teaches said first means causing corresponding one of said data deleting means to delete said intermediate data of said particular information object in said memory region when the display priority of said particular information object is lower than a predetermined threshold; said first means deleting the managing data of said particular information object in said memory region when the display priority of said particular information object is lower than a predetermined threshold (col.15, lines 35-41, *deleting data content*). It would have been obvious to an artisan at the time of the invention to combine Gounares' teaching with the apparatus of Robertson and Weinberg because it allows for flexibility by providing document change and update capabilities.

As per claim 12, Robertson and Weinberg teach the information processing apparatus

further comprising: a memory region for storing therein display data including intermediate data

for displaying said plurality of information objects (FIG.1, col.4, lines 50-52, *internal memory*),

but do not teach a memory managing means for deleting data in memory region. However,

Gounares teaches memory managing means for detecting an amount of said memory region

occupied by said display data and time-sequentially deleting at least part of intermediate data in

said memory region which has not been used for display image generation for the longest time

(col. 15, lines 35-41, *deleting data content*). It would have been obvious to an artisan at the time

of the invention to combine Gounares' teaching with the apparatus of Robertson and Weinberg

because it allows for flexibility by providing document change and update capabilities.

Claim 19 is similar to claim 5 and therefore is rejected under similar rationale.

Claim 23 is similar to claim 12 and therefore is rejected under similar rationale.

### *Response to Arguments*

Applicant's arguments with respect to the amendment have been considered but are moot

in view of the new ground(s) of rejection.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action.  Accordingly, **THIS ACTION IS MADE FINAL**.  See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action.  In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

### *Inquiries*

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Thanh T. Vu whose telephone number is (571) 272-4073. The

examiner can normally be reached on Mon-Thur and every other Fri 8:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kristine L. Kincaid can be reached on (571) 272-4063. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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